

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/730,898	TANAKA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kimnhung Nguyen	2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/10/06.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

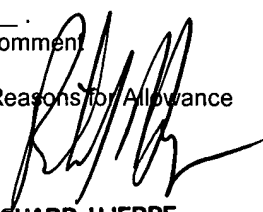
4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 12/10/03, 9/9/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
**RICHARD HJERPE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**

**DETAILED ACTION**

1. This application has been examined. The claims 1-30 are allowed.

***Examiner's Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Grant K. Rowan on 10/10/06.

**3. Amendment To Claims:**

1. A plasma display panel including:
- (a) a first substrate;
  - (b) a second substrate facing said first substrate;
  - (c) a plurality of first electrodes formed on a surface of said first substrate which surface faces said second substrate, said first electrodes extending in parallel with one another in a first direction, and each having an input terminal through which a pulse is input thereinto;
  - (d) a plurality of second electrodes formed on a surface of said second substrate which surface faces said first substrate, said second electrodes extending in parallel with one another in a second direction perpendicular to said first direction, and each having an input terminal through which a pulse is input thereinto; and
  - (e) a plurality of display cells arranged at intersections of said first

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electrodes with said second electrodes,

wherein a first selection pulse is input into said first electrodes and a second selection pulse is input selectively into one or more of said second electrodes to thereby control whether light is to be emitted in each of said display cells, and

at least one of said display cells has a third electrode formed on said first substrate and being electrically connected to a first electrode other than a first electrode belonging to a display cell to which said third electrode belongs.

3. A plasma display panel including:

(a) a first substrate;

(b) a second substrate facing said first substrate;

(c) a plurality of first electrodes formed on a surface of said first substrate which surface faces said second substrate, said first electrodes extending in parallel with one another in a first direction, and each having an input terminal through which a pulse is input thereinto;

(d) a plurality of second electrodes formed on a surface of said second substrate which surface faces said first substrate, said second electrodes extending in parallel with one another in a second direction perpendicular to said first direction, and each having an input terminal through which a pulse is input thereinto;

(e) a plurality of fourth electrodes extending in parallel with said first electrodes with a primary discharge gap being sandwiched therebetween; and

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(f) a plurality of display cells arranged at intersections of said first and fourth electrodes with said second electrodes,

wherein a first selection pulse is input into said first electrodes and a second selection pulse is input selectively into one or more of said second electrodes to thereby control whether light is to be emitted in each of said display cells, and

at least one of said display cells has a third electrode formed on said first substrate and being electrically connected to a first electrode other than a first electrode belonging to a display cell to which said third electrode belongs.

7. A plasma display panel including:

(a) a first substrate;

(b) a second substrate facing said first substrate;

(c) a plurality of first electrodes formed on a surface of said first substrate which surface faces said second substrate, said first electrodes extending in parallel with one another in a first direction, and each having an input terminal through which a pulse is input thereinto;

(d) a plurality of second electrodes formed on a surface of said second substrate which surface faces said first substrate, said second electrodes extending in parallel with one another in a second direction perpendicular to said first direction, and each having an input terminal through which a pulse is input thereinto;

(e) a plurality of fourth electrodes extending in parallel with said first

electrodes with a primary discharge gap being sandwiched therebetween;

(f) a plurality of fifth electrodes extending in parallel with said first and fourth electrodes; and

(g) a plurality of display cells arranged at intersections of said first and fourth electrodes with said second electrodes,

wherein a first selection pulse is input into said first electrodes and a second selection pulse is input selectively into one or more of said second electrodes to thereby control whether light is to be emitted in each of said display cells, and

at least one of said display cells has a third electrode formed on said first substrate and being electrically connected to a first electrode other than a first electrode belonging to a display cell to which said third electrode belongs.

11. A method of driving a plasma display panel including:

(a) a first substrate;

(b) a second substrate facing said first substrate;

(c) a plurality of first electrodes formed on a surface of said first substrate which surface faces said second substrate said first electrodes extending in parallel with one another in a first direction, and each having an input terminal through which a pulse is input thereinto;

(d) a plurality of second electrodes formed on a surface of said second substrate which surface faces said first substrate, said second electrodes extending in parallel with one another in a second direction perpendicular to said

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first direction, and each having an input terminal through which a pulse is input thereinto; and

(e) a plurality of display cells arranged at intersections of said first electrodes with said second electrodes,

wherein a first selection pulse is input into said first electrodes and a second selection pulse is input selectively into one or more of said second electrodes to thereby control whether light is to be emitted in each of said display cells, and at least one of said display cells has a third electrode formed on said first substrate and being electrically connected to a first electrode A other than a first electrode B belonging to a display cell to which said third electrode belongs,

said method including the steps of:

(a) in at least one of said display cells having said third electrode, by the application of said first selection pulse to said first electrode A, generating priming discharge at a third electrode in said display cell; and

(b) applying said first selection pulse to said first electrode B subsequently to said step (a).

13. A method of driving a plasma display panel including:

(a) a first substrate;

(b) a second substrate facing said first substrate;

(c) a plurality of first electrodes formed on a surface of said first substrate which surface faces said second substrate, said first electrodes extending in

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parallel with one another in a first direction, and each having an input terminal through which a pulse is input thereinto;

(d) a plurality of second electrodes formed on a surface of said second substrate which surface faces said first substrate, said second electrodes extending in parallel with one another in a second direction perpendicular to said first direction, and each having an input terminal through which a pulse is input thereinto;

(e) a plurality of fourth electrodes extending in parallel with said first electrodes with a primary discharge gap being sandwiched therebetween; and

(f) a plurality of display cells arranged at intersections of said first and fourth electrodes with said second electrodes,

wherein a first selection pulse is input into said first electrodes and a second selection pulse is input selectively into one or more of said second electrodes to thereby control whether light is to be emitted in each of said display cells, and

at least one of said display cells has a third electrode formed on said first substrate and being electrically connected to a first electrode A other than a first electrode B belonging to a display cell to which said third electrode belongs, said method including the steps of:

(a) in at least one of said display cells having said third electrode, by the application of said first selection pulse to said first electrode A, generating priming discharge at a third electrode in said display cell; and

(b) applying said first selection pulse to said first electrode B subsequently

to said step (a).

24. A method of driving a plasma display panel including:

(a) a first substrate;

(b) a second substrate facing said first substrate;

(c) a plurality of first electrodes formed on a surface of said first substrate which surface faces said second substrate, said first electrodes extending in parallel with one another in a first direction, and each having an input terminal through which a pulse is input therinto;

(d) a plurality of second electrodes formed on a surface of said second substrate which surface faces said first substrate, said second electrodes extending in parallel with one another in a second direction perpendicular to said first direction, and each having an input terminal through which a pulse is input therinto;

(e) a plurality of fourth electrodes extending in parallel with said first electrodes with a primary discharge gap being sandwiched therebetween;

(f) a plurality of fifth electrodes extending in parallel with said first and fourth electrodes; and

(g) a plurality of display cells arranged at intersections of said first and fourth electrodes with said second electrodes,

wherein a first selection pulse is input into said first electrodes and a second selection pulse is input selectively into one or more of said second electrodes to



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thereby control whether light is to be emitted in each of said display cells, and

at least one of said display cells has a third electrode formed on said first substrate and being electrically connected to a first electrode A other than a first electrode B belonging to a display cell to which said third electrode belongs,

said method including the steps of:

(a) in at least one of said display cells having said third electrode, by the application of said first selection pulse to said first electrode A, generating priming discharge at a third electrode in said display cell; and

(b) applying said first selection pulse to said first electrode B subsequently to said step (a).

#### ***Reasons For Allowance***

4. The following is an examiner's statement of reasons for allowance: The present invention is directed to a plasma display panel including a first substrate; a second substrate facing said first substrate, a plurality of first electrodes formed on a surface of said first substrate which surface faces said second substrate, said first electrodes extending in parallel with one another in a first direction, and each having an input terminal through which a pulse is input thereinto; a plurality of second electrodes formed on a surface of said second substrate which surface faces said first substrate, said second electrodes extending in parallel with one another in a second direction perpendicular to said first direction. The combination of the closest prior art of Kashio et al. (US 2004/0113871), Kim (US 2003/0034937) and Tannaka (US 2003/0234753) showed a similar invention, however, they fail to teach that wherein a first selection pulse is input into said

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first electrodes and a second selection pulse is input selectively into one or more of said second electrodes to thereby control whether light is to be emitted in each of said display cells, and at least one of said display cells has a third electrode formed on said first substrate and being electrically connected to a first electrode other than a first electrode belonging to a display cell to which said third electrode belongs as claims 1, 3, 7, 11, 13 and 24.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### *Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimnhung Nguyen  
October 19, 2006

A handwritten signature in black ink, appearing to read 'R. Hjerpe', with a stylized, cursive script.

**RICHARD HJERPE**  
**SUPERVISORY PATENT EXAMINER**  
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